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EXAMINER	
TORRES, JUAN A	

ART UNIT	PAPER NUMBER
2631	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/071,954	BACH ET AL.	
	Examiner	Art Unit	
	Juan A. Torres	2631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 September 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6-13 and 16-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6-13 and 16-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

The modifications to the specification were received on 09/12/2005. These modifications are accepted by the Examiner.

Claim Rejections - 35 USC § 112

In view of the amendment filed on 09/12/2005, the Examiner withdraws claim rejections under 35 USC 112 of claims 8 and 18 of the previous Office action.

Response to Arguments

Applicant's arguments filed on 09/12/2005 have been fully considered and they are persuasive.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 6 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lapierre (US 6163230) in view of Chang (US 20040213229 A1).

As per claim 1 Lapierre discloses a system for modulating an RF carrier comprising a low pass filter with input connected to the RF carrier, said low pass filter producing a first phase shifted carrier output (figure 3 block 17 column 5 lines 50-59 and column 9 line 53 to column 10 line 11); a high pass filter with input connected to the RF carrier, said high pass filter producing a second phase shifted carrier output (figure 3

block 18 column 5 lines 50-59 and column 9 line 53 to column 10 line 11); a data port for receiving data bit information (figure 2 input to blocks 21 and 22 column 5 lines 50-59 and column 9 line 53 to column 10 line 11); and a switch connected to an output of said low pass filter and connected to an output of said high pass filter, said switch configured to select and output either said first phase shifted carrier output from said low pass filter or said second phase shifted carrier output from said high pass filter depending on a switching state, said switching state determined by said data bit information at said data port (figure 3 blocks 21 and 22 column 5 lines 50-59 and column 9 line 53 to column 10 line 11). Lapierre doesn't disclose a notch filter centered at the frequency of the RF carrier. Where the notch filter feeds said data bit information exclusive of said RF carrier to the data port. Chang discloses a notch filter centered at the frequency of the RF carrier, where the notch filter feeds a data bit information exclusive of said RF carrier to a data port (figure 26 paragraph [0186]). Lapierre and Chang are analogous art because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine in the phase-shift keying electronic circuit with distributed structure disclosed by Lapierre the notch filter disclosed by Chang. The suggestion/motivation for doing so would have been to maintain only the baseband data spectrum (Chang paragraph [0186]). Therefore, it would have been obvious to combine Lapierre with Chang to obtain the invention as specified in claim 1.

As per claim 2 Lapierre inherently discloses that the low pass filter phase shifts the RF carrier approximately -90 degrees to produce said first phase shifted carrier

output (column 4 lines 57-65 and figure 3 blocks 21 and 22 column 5 lines 50-59 and column 9 line 53 to column 10 line 11). Lapierre and Chang are analogous art because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine in the phase-shift keying electronic circuit with distributed structure disclosed by Lapierre the notch filter disclosed by Chang. The suggestion/motivation for doing so would have been to maintain only the baseband data spectrum (Chang paragraph [0186]). Therefore, it would have been obvious to combine Lapierre with Chang to obtain the invention as specified in claim 2.

As per claim 3 Lapierre inherently discloses that the high pass filter phase shifts the RF carrier approximately +90 degrees to produce said second phase shifted carrier output (column 4 lines 57-65 and figure 3 blocks 21 and 22 column 5 lines 50-59 and column 9 line 53 to column 10 line 11). Lapierre and Chang are analogous art because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine in the phase-shift keying electronic circuit with distributed structure disclosed by Lapierre the notch filter disclosed by Chang. The suggestion/motivation for doing so would have been to maintain only the baseband data spectrum (Chang paragraph [0186]). Therefore, it would have been obvious to combine Lapierre with Chang to obtain the invention as specified in claim 3.

As per claim 4 Lapierre inherently discloses a power divider configured to split the RF carrier into two equal amplitude signals and feed the RF carrier into said low

pass filter and into said high pass filter (figure 1 block 6 column 6 line 66 to column 7 line 34 column 7 lines 59-65 column 98 line 45-54 and column 11 lines 57-63). Lapierre and Chang are analogous art because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine in the phase-shift keying electronic circuit with distributed structure disclosed by Lapierre the notch filter disclosed by Chang. The suggestion/motivation for doing so would have been to maintain only the baseband data spectrum (Chang paragraph [0186]). Therefore, it would have been obvious to combine Lapierre with Chang to obtain the invention as specified in claim 4.

As per claim 6 Lapierre discloses that the system is fabricated using MMIC (column 2 lines 24-28 column 4 lines 3-7). Lapierre and Chang are analogous art because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine in the phase-shift keying electronic circuit with distributed structure disclosed by Lapierre the notch filter disclosed by Chang. The suggestion/motivation for doing so would have been to maintain only the baseband data spectrum (Chang paragraph [0186]). Therefore, it would have been obvious to combine Lapierre with Chang to obtain the invention as specified in claim 6.

As per claim 19 Lapierre discloses a method for modulating an RF carrier comprising a low pass filter with input connected to the RF carrier, said low pass filter producing a first phase shifted carrier output (figure 3 block 17 column 5 lines 50-59 and column 9 line 53 to column 10 line 11); a high pass filter with input connected to the RF

carrier, said high pass filter producing a second phase shifted carrier output (figure 3 block 18 column 5 lines 50-59 and column 9 line 53 to column 10 line 11); a data port for receiving data bit information (figure 2 input to blocks 21 and 22 column 5 lines 50-59 and column 9 line 53 to column 10 line 11); and a switch connected to an output of said low pass filter and connected to an output of said high pass filter, said switch configured to select and output either said first phase shifted carrier output from said low pass filter or said second phase shifted carrier output from said high pass filter depending on a switching state, said switching state determined by said data bit information at said data port (figure 3 blocks 21 and 22 column 5 lines 50-59 and column 9 line 53 to column 10 line 11). Lapierre doesn't disclose a notch filter centered at the frequency of the RF carrier providing the data bit information to the data port. Chang discloses a notch filter centered at the frequency of the RF carrier providing the data bit information to a data port (figure 26 paragraph [0186]). Lapierre and Chang are analogous art because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine in the phase-shift keying electronic circuit with distributed structure disclosed by Lapierre the notch filter disclosed by Chang. The suggestion/motivation for doing so would have been to maintain only the baseband data spectrum (Chang paragraph [0186]). Therefore, it would have been obvious to combine Lapierre with Chang to obtain the invention as specified in claim 9.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lapierre and Chang as applied to claim 1 above, and further in view of Desrosiers (US 6434199).

Lapierre and Chang disclose claim 1. Lapierre and Chang don't disclose that the system is fabricated using ASIC. The use of ASIC is well known and Desrosiers discloses that the system is fabricated using ASIC (column 1 lines 51-66). Lapierre, Chang and Desrosiers are analogous art because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine in the phase-shift keying electronic circuit with distributed structure disclosed by Lapierre and Chang with the ASIC implementation disclosed by Desrosiers. The suggestion/motivation for doing so would have been to use a typical implementation (Desrosiers column 1 lines 51-66). Therefore, it would have been obvious to combine Lapierre and Chang with Desrosiers to obtain the invention as specified in claim 7.

Claims 8-13, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lapierre (US 6163230) in view of admitted prior art and further in view of Chang (US 20040213229 A1).

As per claim 8 Lapierre discloses a system for modulating an RF carrier comprising a low pass filter with input connected to the RF carrier, said low pass filter producing a phase shifted carrier output (figure 3 block 17 column 5 lines 50-59 and column 9 line 53 to column 10 line 11); a high pass filter with input connected to the RF carrier, said high pass filter producing a phase shifted carrier output (figure 3 block 18 column 5 lines 50-59 and column 9 line 53 to column 10 line 11); a first BPSK modulator comprising a first low pass filter with input connected to said first input, said first low pass filter producing a first phase shifted carrier output (figure 3 block 17 column 5 lines 50-59 and column 9 line 53 to column 10 line 11); a first high pass filter with input

connected to said first input, said first high pass filter producing a second phase shifted carrier output (figure 3 block 18 column 5 lines 50-59 and column 9 line 53 to column 10 line 11); a first data port for receiving a first data bit information (figure 2 input to blocks 21 and 22 column 5 lines 50-59 and column 9 line 53 to column 10 line 11); and a first switch connected to an output of said first low pass filter and connected to an output of said first high pass filter, said first switch configured to select and output either said first phase shifted carrier output or said second phase shifted carrier output depending on a first switching state, said first switching state determined by said first data bit information at said first data port (figure 3 blocks 21 and 22 column 5 lines 50-59 and column 9 line 53 to column 10 line 11); a second BPSK modulator comprising a second low pass filter with input connected to said second input, said second low pass filter producing a third phase shifted carrier output (figure 3 block 17 column 5 lines 50-59 and column 9 line 53 to column 10 line 11); a second high pass filter with input connected to said second input, said second high pass filter producing a fourth phase shifted carrier output (figure 3 block 18 column 5 lines 50-59 and column 9 line 53 to column 10 line 11); a second data port for receiving a second data bit information (figure 2 input to blocks 21 and 22 column 5 lines 50-59 and column 9 line 53 to column 10 line 11); and a second switch connected to an output of said second low pass filter and connected to an output of said second high pass filter, said second switch configured to select and output either said third phase shifted carrier output or said fourth phase shifted carrier output depending on a second switching state, said second switching state determined by said second data bit information at said second data port (figure 3 blocks 21 and 22 column 5 lines

50-59 and column 9 line 53 to column 10 line 11). Lapierre doesn't disclose the use in parallel of two PSK modulators and a power divider connected to an output of said first BPSK modulator and connected to an output of said second BPSK modulator, said power divider configured to produce a QPSK output vector sum of said output of said first BPSK modulator and said output of said second BPSK modulator; and that the first and second data ports are feed through a first and second notch filters centered about the RF carrier frequency. Admitted prior art discloses the use in parallel of two PSK modulators and a power divider connected to an output of said first BPSK modulator and connected to an output of said second BPSK modulator, said power divider configured to produce a QPSK output vector sum of said output of said first BPSK modulator and said output of said second BPSK modulator (figure 5 page 4 to page 6 paragraphs [0010] to [0012]). Lapierre and admitted prior art are analogous art because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine in the phase-shift keying electronic circuit with distributed structure disclosed by Lapierre with the QAM modulator disclosed by the prior art. The suggestion/motivation for doing so would have been to produce a QAM modulator (admitted prior art page 4 paragraph [0010]). Chang discloses a notch filter centered at the frequency of the RF carrier, where the notch filter feeds a data bit information exclusive of said RF carrier to a data port (figure 26 paragraph [0186]). Lapierre and Chang are analogous art because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine in the phase-shift keying electronic circuit

with distributed structure disclosed by Lapierre the notch filter disclosed by Chang. The suggestion/motivation for doing so would have been to maintain only the baseband data spectrum (Chang paragraph [0186]). Therefore, it would have been obvious to combine Lapierre with admitted prior art and Chang to obtain the invention as specified in claim 8.

As per claim 9 Lapierre, admitted prior art and Chang disclose claim 8. Lapierre also discloses that the low pass filter phase shifts the RF carrier approximately -45 degrees to produce said phase shifted carrier output (column 4 lines 57-65 and figure 3 blocks 21 and 22 column 5 lines 50-59 and column 9 line 53 to column 10 line 11). Lapierre and admitted prior art are analogous art because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine in the phase-shift keying electronic circuit with distributed structure disclosed by Lapierre with the QAM modulator disclosed by the prior art. The suggestion/motivation for doing so would have been to produce a QAM modulator (admitted prior art page 4 paragraph [0010]). Therefore, it would have been obvious to combine Lapierre with admitted prior art to obtain the invention as specified in claim 9.

As per claim 10 Lapierre, admitted prior art and Chang disclose claim 8. Lapierre also discloses that the high pass filter phase shifts the RF carrier approximately +45 degrees to produce said phase shifted carrier output (column 4 lines 57-65 and figure 3 blocks 21 and 22 column 5 lines 50-59 and column 9 line 53 to column 10 line 11). Lapierre and admitted prior art are analogous art because they are from the same field

of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine in the phase-shift keying electronic circuit with distributed structure disclosed by Lapierre with the QAM modulator disclosed by the prior art. The suggestion/motivation for doing so would have been to produce a QAM modulator (admitted prior art page 4 paragraph [0010]). Therefore, it would have been obvious to combine Lapierre with admitted prior art to obtain the invention as specified in claim 10.

As per claim 11 Lapierre, admitted prior art and Chang disclose claim 8. Lapierre also discloses that the low pass filter and second low pass filter phase shift the RF carrier an additional approximately -90 degrees to produce said first phase shifted carrier output and said third phase shifted carrier output, respectively (column 4 lines 57-65 and figure 3 blocks 21 and 22 column 5 lines 50-59 and column 9 line 53 to column 10 line 11). Lapierre and admitted prior art are analogous art because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine in the phase-shift keying electronic circuit with distributed structure disclosed by Lapierre with the QAM modulator disclosed by the prior art. The suggestion/motivation for doing so would have been to produce a QAM modulator (admitted prior art page 4 paragraph [0010]). Therefore, it would have been obvious to combine Lapierre with admitted prior art to obtain the invention as specified in claim 11.

As per claim 12 Lapierre, admitted prior art and Chang disclose claim 8. Lapierre also discloses that the low pass filter and second low pass filter phase shift the RF

carrier an additional approximately -90 degrees to produce said first phase shifted carrier output and said third phase shifted carrier output, respectively (column 4 lines 57-65 and figure 3 blocks 21 and 22 column 5 lines 50-59 and column 9 line 53 to column 10 line 11). Lapierre and admitted prior art are analogous art because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine in the phase-shift keying electronic circuit with distributed structure disclosed by Lapierre with the QAM modulator disclosed by the prior art. The suggestion/motivation for doing so would have been to produce a QAM modulator (admitted prior art page 4 paragraph [0010]). Therefore, it would have been obvious to combine Lapierre with admitted prior art to obtain the invention as specified in claim 12.

As per claim 13 Lapierre, admitted prior art and Chang disclose claim 8. Lapierre also discloses a power divider configured to split the RF carrier into two equal amplitude signals and feed the RF carrier into said low pass filter and into said high pass filter (figure 1 block 6 column 6 line 66 to column 7 line 34 column 7 lines 59-65 column 98 line 45-54 and column 11 lines 57-63). Lapierre and admitted prior art are analogous art because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine in the phase-shift keying electronic circuit with distributed structure disclosed by Lapierre with the QAM modulator disclosed by the prior art. The suggestion/motivation for doing so would have been to produce a QAM modulator (admitted prior art page 4 paragraph [0010]).

Therefore, it would have been obvious to combine Lapierre with admitted prior art to obtain the invention as specified in claim 13.

As per claim 16 Lapierre, admitted prior art and Chang disclose claim 8. Lapierre also discloses that the system is fabricated using MMIC (column 2 lines 24-28 column 4 lines 3-7). Lapierre and admitted prior art are analogous art because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine in the phase-shift keying electronic circuit with distributed structure disclosed by Lapierre with the QAM modulator disclosed by the prior art. The suggestion/motivation for doing so would have been to produce a QAM modulator (admitted prior art page 4 paragraph [0010]). Therefore, it would have been obvious to combine Lapierre with admitted prior art to obtain the invention as specified in claim 16.

As per claim 18 Lapierre discloses a system and a method for modulating an RF carrier comprising a low pass filter with input connected to the RF carrier, said low pass filter producing a first phase shifted carrier output (figure 3 block 17 column 5 lines 50-59 and column 9 line 53 to column 10 line 11); a high pass filter with input connected to the RF carrier, said high pass filter producing a second phase shifted carrier output (figure 3 block 18 column 5 lines 50-59 and column 9 line 53 to column 10 line 11); a data port for receiving data bit information (figure 2 input to blocks 21 and 22 column 5 lines 50-59 and column 9 line 53 to column 10 line 11); and a switch connected to an output of said low pass filter and connected to an output of said high pass filter, said switch configured to select and output either said first phase shifted carrier output from

said low pass filter or said second phase shifted carrier output from said high pass filter depending on a switching state, said switching state determined by said data bit information at said data port (figure 3 blocks 21 and 22 column 5 lines 50-59 and column 9 line 53 to column 10 line 11). Lapierre doesn't disclose a QAM modulation system using a first and a second QPSK modulators an attenuator, a vector summer and that the data ports are feed through a notch filters centered about the RF carrier frequency. Admitted prior art discloses a QAM modulation system using a first and a second QPSK modulators (figure 5 blocks 510 and 520 page 4 to page 6 paragraphs [0010] to [0012]); an attenuator with input connected to an output of said second QPSK modulator (figure 5 block 527 page 4 to page 6 paragraphs [0010] to [0012]); and a vector summer connected to an output of said first QPSK modulator and connected to an output of said attenuator, said vector summer configured to produce a QAM output vector sum of said output of said first QPSK modulator and said output of said attenuator (figure 5 block 530 page 4 to page 6 paragraphs [0010] to [0012]). Lapierre and admitted prior art are analogous art because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine in the phase-shift keying electronic circuit with distributed structure disclosed by Lapierre with the QAM modulator disclosed by the prior art. The suggestion/motivation for doing so would have been to produce a QAM modulator (admitted prior art page 4 paragraph [0010]). Chang discloses a notch filter centered at the frequency of the RF carrier, where the notch filter feeds a data bit information exclusive of said RF carrier to a data port (figure 26 paragraph [0186]).

Lapierre and Chang are analogous art because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine in the phase-shift keying electronic circuit with distributed structure disclosed by Lapierre the notch filter disclosed by Chang. The suggestion/motivation for doing so would have been to maintain only the baseband data spectrum (Chang paragraph [0186]). Therefore, it would have been obvious to combine Lapierre with admitted prior art and Chang to obtain the invention as specified in claim 18.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lapierre, admitted prior art and Chang as applied to claim 8 above, and further in view of Desrosiers (US 6434199). Lapierre and admitted prior art disclose claim 8. Lapierre and admitted prior art don't disclose that the system is fabricated using ASIC. The use of ASIC is well known and Desrosiers discloses that the system is fabricated using ASIC (column 1 lines 51-66). Lapierre, admitted prior art and Desrosiers are analogous art because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine in the QAM electronic circuit with distributed structure disclosed by Lapierre and admitted prior art with the ASIC implementation disclosed by Desrosiers. The suggestion/motivation for doing so would have been to use a typical implementation (Desrosiers column 1 lines 51-66). Therefore, it would have been obvious to combine Lapierre and admitted prior art with Desrosiers to obtain the invention as specified in claim 17.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juan A. Torres whose telephone number is (571) 272-3119. The examiner can normally be reached on Monday-Friday 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H. Ghayour can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Juan Alberto Torres
09-28-2005

KEVIN BURD
PRIMARY EXAMINER